

REMARKS/ARGUMENTS

Applicants acknowledge receipt of the Office Action dated April 13, 2006. By this Response, claim 1 is amended. Claims 1-17 and 21-23 are pending in the application. Claims 1-13, 16-17, and 21-23 are rejected under 35 U.S.C. § 103 as being unpatentable over Phanopoulos, WO 00/44803 ("WO '803") in view of Cone et al., U.S. Patent No. 4,115,178 ("Cone"), and vice versa and further in view of 4-H Woodworking Going for the Gold Questions ("4-H"). The Examiner has also rejected claims 14-15 under 35 U.S.C. § 103 as being unpatentable over WO '803 in view of Cone as applied to claim 6 or 7, and further in view of either Robitschek et al., U.S. Patent No. 4,403,013 ("Robitschek") or National Evaluation Report (dated 11-2002) on LINESTAR™ Adhesives ("LINESTAR™"). Applicants believe all pending claims are allowable over the art of record and respectfully request reconsideration and allowance of all claims.

I. Claims 1-13, 16-17, and 21-23 are patentable over WO '803 in view of Cone, and vice versa, and further in view of 4-H.

Applicants respectfully traverse the Examiner's rejections of claims 1-13, 16-17, and 21-23 under § 103 as being unpatentable over WO '803 in view of Cone, and vice versa, and further in view of 4-H. Applicants submit that contrary to MPEP § 2143, the Examiner has failed to make a *prima facie* case of obviousness in rejecting such claims in that (1) the Examiner has failed to cite references that teach or suggest all of the elements recited in the rejected claims, and (2) the Examiner has failed to articulate a motivation or suggestion to combine the references with a reasonable expectation of success.

Claim 1 is an independent claim upon which claims 2-13, 16-17, and 21-23 depend. Claim 1 recites "providing an organic polyisocyanate laminating adhesive" and "a ribbon coating apparatus." Claim 1, as amended, further recites "pressing the loose stack of veneers in a single pressing operation comprising the pressing means under conditions suitable to cause the polyisocyanate laminating adhesive to at least partially cure to form an adhesive bonded wood laminate." (Claim 1, emphasis added). In regards to WO '803 in view of Cone, nothing in WO '803 teaches or suggests a ribbon coating apparatus. For instance, the Examiner has noted that WO '803 "does not teach using 'a ribbon coating apparatus' for applying an adhesive onto a

surface of a veneer.” (Office Action dated 1/12/06, pg. 2, para. 3) In combining the teachings of *Cone* with *WO '803*, the Examiner has noted that “it would have been obvious in the art to use ‘a ribbon coating apparatus’ for applying a foamable moisture-curable isocyanate adhesive onto a surface of a veneer because: a) *Cone* . . . teaches the desirability of applying continuous or discontinuous foamable adhesive ribbons using a ribbon coating apparatus.” (Office Action dated 1/12/06, pgs. 2-3, para. 7, emphasis added)

Applicants respectfully submit that *Cone* cannot supply *WO '803* with these missing limitations because the Examiner has not articulated a motivation or suggestion to combine *WO '803* and *Cone* with a reasonable expectation of success with respect to claim 1. For instance, the MPEP provides that “[i]f [a] proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.” (MPEP § 2143.01 V.) In addition, “[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.” (MPEP § 2143.01.III.) Applicants respectfully submit that modifying *WO '803* with the teachings of *Cone* would render *WO '803* unsatisfactory for the purpose of the *WO '803* invention. Moreover, Applicants respectfully submit that the cited art provides no suggestion for the desirability of the combination as *WO '803* teaches away from *Cone*.

For instance, *WO '803* discloses that an intended purpose of the invention is using unfoamed adhesives. (*WO '803*, pg. 3, lns. 17-19) In support of such stated purpose, *WO '803* discloses the drawbacks of conventional foamed adhesives by teaching that “foamed materials are generally weak and do not perform adequately.” (*WO '803*, pg. 3, ln. 16) *WO '803* further teaches that “it would be beneficial to achieve thicker gluelines . . . with unfoamed materials.” (*WO '803*, pg. 3, lns. 17-19)

Therefore, *WO '803* expressly addresses foamed adhesives and teaches that such foamed adhesives would be against a stated purpose of the invention of *WO '803*. Applicants note the Examiner’s position that “veneers can successfully be bonded using a polyisocyanate foamed adhesive. Equally important, it is quite clear from the teachings of *WO '803* that ‘the performance of foamed materials’ can readily be enhanced by adding a filler to the foamed materials.” (Office Action dated 1/12/06, pg. 5, lns. 16-21) Applicants respectfully submit

that whether veneers can be successfully bonded using foamed adhesives, as set forth by the Examiner, or cannot be successfully bonded using foamed adhesives, such teachings of *Cone* are against an explicitly stated purpose of *WO '803*. Moreover, *WO '803* specifically teaches away from using fillers. (*WO '803*, pg. 3, lns. 7-10 and 21-26) For instance, *WO '803* teaches that “there is a clear need for alternative one component [adhesives] which do not contain fillers. . . .” (*WO '803*, pg. 3, lns. 21-26, emphasis added) *WO '803* further teaches that “[t]he above objectives have been met by the present adhesive compositions . . . without the use of fillers” (*WO '803*, pg. 3, lns. 29-32) Therefore, as discussed above, there is no motivation in *WO '803* to combine the teachings with *Cone* as *WO '803* teaches away from such a combination. As further discussed above, a combination of the teachings of *Cone* with *WO '803* would provide *WO '803* with an adhesive that is unsatisfactory for an intended purpose of *WO '803*, which is providing an unfoamed adhesive that does not contain fillers.

In regards to *Cone* in view of *WO '803*, nothing in *Cone* teaches or suggests an “organic polyisocyanate laminating adhesive” or “pressing the loose stack of veneers in a single pressing operation comprising the pressing means under conditions suitable to cause the polyisocyanate laminating adhesive to at least partially cure to form an adhesive bonded wood laminate,” as recited by claim 1. Instead, *Cone* teaches foamed adhesives. (*Cone*, Abstract) Moreover, *Cone* requires more than one pressing operation, including a prepressing operation and a pressing operation. (*Cone*, col. 2, lns. 21-32) Applicants respectfully point out that *Cone* teaches away from pressing the loose stack of veneers in a single pressing operation comprising the pressing means under conditions suitable to cause the polyisocyanate laminating adhesive to at least partially cure to form an adhesive bonded wood laminate. For instance, *Cone* teaches that prepressing “precludes loading into the press an assembly of loose veneers” (*Cone*, col. 1, lns. 41-44, emphasis added) *Cone* teaches that a “board” and not a loose stack of veneers is added to the final press. (*Cone*, col. 4, lns. 9-15) Moreover, the prepressing operation of *Cone* does not teach or suggest such missing recitations. For instance, *Cone* teaches that the prepressing “pressure is applied for but a fraction of a second” and “is not equal in magnitude to the pressure required to produce the final laminated assembly,” (*Cone*, col. 6, lns. 12-13; col. 4, lns. 7-9)

WO '803 cannot supply the missing limitations to *Cone* because the Examiner has not articulated a motivation or suggestion to combine WO '803 and *Cone* with a reasonable expectation of success with respect to claim 1. Applicants respectfully submit that modifying *Cone* with the teachings of WO '803 would render *Cone* unsatisfactory for the purpose of his invention. Moreover, Applicants respectfully submit that the cited art provides no suggestion for the desirability of the combination as *Cone* teaches away from WO '803.

For instance, *Cone* discloses that an intended purpose of his invention is an improved method of making plywood that provides "a result which can be achieved on a continuous, commercial scale basis only by prepressing panel assemblies including glue in a foamed condition." (*Cone*, col. 7, lns. 21-23, emphasis added). In support of such stated purpose, *Cone* teaches that "significant advantages" of his invention include prepressing and the use of foamed glue. (*Cone*, col. 4, lns. 57-64) *Cone* further teaches that "[t]he use of foamed glue improves the efficiency of the prepressing operation." (*Cone*, col. 4, lns. 62-63) Moreover, *Cone* even explicitly teaches away from not having a prepressing operation and using an unfoamed glue. For instance, *Cone* compares the results of pane assemblies prepared using a prepressing operation to those prepared without a prepressing operation. (*Cone*, col. 6, ln. 21, col. 7, ln. 13) Such comparisons include the teaching that "[i]n every instance better results are obtained by prepressing." (*Cone*, col. 7, lns. 16-17) Further comparisons include the teaching that the unfoamed glues are insufficient in comparison to the foamed glues in filling the gap between veneer surfaces. (*Cone*, col. 5, lns. 3-11, col. 6, lns. 13-22)

Therefore, as discussed above, there is no motivation in *Cone* to combine the teachings of WO '803 as *Cone* teaches away from such a combination. As further discussed above, a combination of the teachings of WO '803 with *Cone* to provide *Cone* with a single pressing operation and using an organic polyisocyanate laminating adhesive would clearly provide a process that is unsatisfactory for the intended purpose of *Cone*, which is using a foamed adhesive with a prepressing operation to provide a panel assembly.

In addition, Applicants respectfully submit that 4-11 cannot provide any of the missing limitations to *Cone* and WO '803 as 4-11 does not teach or suggest any of the missing recitations. Accordingly, Applicants respectfully request that the Examiner withdraw the § 103 rejections and allow claim 1. Since independent claim 1 is submitted to be allowable,

dependent claims 2-13, 16-17, and 21-23 must *a fortiori* also be allowable, since they carry with them all the limitations of claim 1.

II. Claims 14-15 are patentable over WO '803 in view of Cone as applied to claim 6 or 7 and further in view of either Robitschek or LINESTAR™.

Applicants respectfully traverse the Examiner's rejections of claims 14-15 under § 103 as being unpatentable over WO '803 in view of Cone as applied to claim 6 or 7 and further in view of either Robitschek or LINESTAR™. Applicants submit that contrary to MPEP § 2143, the Examiner has failed to make a *prima facie* case of obviousness.

Claims 14-15 depend upon independent claim 1. As noted above in Section I, WO '803 in view of Cone and vice versa do not teach or suggest all recitations of claim 1. Furthermore, neither Robitschek nor LINESTAR™ can supply the missing limitations to WO '803 or Cone. For instance, nothing in Robitschek or LINESTAR™ teaches or suggests a ribbon coating apparatus.

Applicants therefore respectfully submit that the Examiner has failed to articulate a *prima facie* case of obviousness in rejecting claims 14-15, because, contrary to MPEP section 2143, the Examiner has failed to cite references that teach or suggest all of the elements recited in the rejected claims. Since independent claim 1 is submitted to be allowable, dependent claims 14-15 must *a fortiori* also be allowable, since they carry with them all the limitations of independent claim 1.


III. Conclusion

Applicants respectfully request reconsideration, allowance of the pending claims and a timely Notice of Allowance be issued in this case. If the Examiner feels that a telephone conference would expedite the resolution of this case, the Examiner is respectfully requested to contact the undersigned.

In the course of the foregoing discussions, Applicants may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed. The claims must be viewed as a whole, and each limitation of the claims must be

considered when determining the patentability of the claims. Moreover, it should be understood that there may be other distinctions between the claims and the prior art that have yet to be raised, but which may be raised in the future.

Respectfully submitted,



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